

~~0590~~ ~~Per 7/10 0590~~  
ranch 3/5 1/1

CRF Processing Date: 1/26/2002  
 Edited by: \_\_\_\_\_  
 Verified by: [Signature] (STIC staff)

Serial Number: 10/031,598

**ENTERED**

- Changed a file from non-ASCII to ASCII ☒ ENTERED

Changed the margins in cases where the sequence text was "wrapped" down to the next line. ☒ # 2

Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_

Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_

Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_

Inserted mandatory headings, specifically: \_\_\_\_\_

Corrected an obvious error in the response, specifically: 21507 response

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_

Other: \_\_\_\_\_

RECEIVED

**\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.** 3/1/95



PCF/10

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/037,598

DATE: 01/26/2002  
 TIME: 16:29:31

Input Set : A:\PTO.AMC.txt  
 Output Set: N:\CRF3\01252002\J037598.raw

P.S

3 <110> APPLICANT: Monsanto Co  
 4 Concibido, Vergel  
 5 Delanney, Xavier  
 7 <120> TITLE OF INVENTION: Soybean Plants with Enhanced Yields and Methods for Breeding  
 for and  
 8 Screening of Soybean Plants with Enhanced Yields  
 10 <130> FILE REFERENCE: 38-21(52175)B  
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/037,598  
 C--> 12 <141> CURRENT FILING DATE: 2002-01-04  
 12 <150> PRIOR APPLICATION NUMBER: 60/260,040  
 13 <151> PRIOR FILING DATE: 2001-01-05  
 15 <160> NUMBER OF SEQ ID NOS: 37  
 17 <170> SOFTWARE: PatentIn version 3.0  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 24  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Glycine max  
 24 <400> SEQUENCE: 1  
 25 ggcgcgacaac tctaatagaaa atct 24  
 28 <210> SEQ ID NO: 2  
 29 <211> LENGTH: 23  
 30 <212> TYPE: DNA  
 31 <213> ORGANISM: Glycine max  
 33 <400> SEQUENCE: 2  
 34 ggcggagtttg atttttcaaaa agt 23  
 37 <210> SEQ ID NO: 3  
 38 <211> LENGTH: 25  
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 40 <213> ORGANISM: Glycine max  
 42 <400> SEQUENCE: 3  
 43 gcgttttaaat ttatgatata accaa 25  
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 47 <211> LENGTH: 24  
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 49 <213> ORGANISM: Glycine max  
 51 <400> SEQUENCE: 4  
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 55 <210> SEQ ID NO: 5  
 56 <211> LENGTH: 25  
 57 <212> TYPE: DNA  
 58 <213> ORGANISM: Glycine max  
 60 <400> SEQUENCE: 5  
 61 atcaatcgac gcaataatca agaaa 25  
 64 <210> SEQ ID NO: 6

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/037,598

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01252002\J037598.raw

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83 <211> LENGTH: 25
84 <212> TYPE: DNA
85 <213> ORGANISM: Glycine max
87 <400> SEQUENCE: 8
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92 <211> LENGTH: 25
93 <212> TYPE: DNA
94 <213> ORGANISM: Glycine max
96 <400> SEQUENCE: 9
97 gtctgcaagc taacagtgtc agagg 25
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101 <211> LENGTH: 26
102 <212> TYPE: DNA
103 <213> ORGANISM: Glycine max
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106 cacactcaat ctcattagca gacacg 26
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110 <211> LENGTH: 25
111 <212> TYPE: DNA
112 <213> ORGANISM: Glycine max
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119 <211> LENGTH: 25
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128 <211> LENGTH: 25
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132 <400> SEQUENCE: 13
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136 <210> SEQ ID NO: 14
137 <211> LENGTH: 25

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## RAW SEQUENCE LISTING

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Input Set : A:\PTO.AMC.txt

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146 <211> LENGTH: 28
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148 <213> ORGANISM: Glycine max
150 <400> SEQUENCE: 15
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154 <210> SEQ ID NO: 16
155 <211> LENGTH: 28
156 <212> TYPE: DNA
157 <213> ORGANISM: Glycine max
159 <400> SEQUENCE: 16
160 gcgatgctta cttttcctat gatcactt 28
163 <210> SEQ ID NO: 17
164 <211> LENGTH: 24
165 <212> TYPE: DNA
166 <213> ORGANISM: Glycine max
168 <400> SEQUENCE: 17
169 gcgtagcaac aaagcaatct acag 24
172 <210> SEQ ID NO: 18
173 <211> LENGTH: 29
174 <212> TYPE: DNA
175 <213> ORGANISM: Glycine max
177 <400> SEQUENCE: 18
178 gcgtcccatt ttattccaca ctatgtaat 29
181 <210> SEQ ID NO: 19
182 <211> LENGTH: 235
183 <212> TYPE: DNA
184 <213> ORGANISM: Glycine max
186 <400> SEQUENCE: 19
187 cgacaactct aatgaaaatc tttattatta ttattattat tattattatt attattattc 60
189 acgaagttcc cttaaaaaat ctttagtaag acacatgcat taattatatg acaataaaaa 120
191 aaaaaagaat tcaaatgttt caaaatgaaa aatcattaat tcacttttat gtcaattatt 180
193 attattatta ttataacatt aattactttg aattgacttt tgaaaaatca aactc 235
196 <210> SEQ ID NO: 20
197 <211> LENGTH: 272
198 <212> TYPE: DNA
199 <213> ORGANISM: Glycine max
201 <400> SEQUENCE: 20
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204 attattatta ttattattat tattattaaa agttatacat gtaaataattt ttttaagggtg 120
206 acattctgaa taaattttta tatgtgattt gggaaaagta gagacaagtt caccctaaaa 180
208 ttaatattca gtaagtggaa cgtctccaaa ttattataa aaattgtaaa tattttattct 240
210 atgcgactga agttgtggaa aaagagataa aa 272
213 <210> SEQ ID NO: 21
214 <211> LENGTH: 280

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221 attatatata tatatatata tatatatata tatatatata tatatatata gacaccccaa      120
223 taaaaatcat attaaaacaa ttataattca taatattcag aataaataaa aatattgaaa      180
225 taaatggcaa cacctcatcg tattcaaata aatataattg acacaacttt atactcaatt      240
227 ttttggttcc tggaatgaca tcccatgtgc ttctcatcat      280
230 <210> SEQ ID NO: 22
231 <211> LENGTH: 366
232 <212> TYPE: DNA
233 <213> ORGANISM: Glycine max
235 <400> SEQUENCE: 22
236 caggcttcag tgtgcataat acagggtttct gttgggtggga ctttctccca acatttcatt      60
238 ttgggatttt ctcccaacct ttattttgtc tgaccttagt cgtaatagtt ctaaccttcc      120
240 ttcttctcct catgtttcat tcgtgatcct gttttttggt atttcagggg gttgtttgag      180
242 cctagtaggg ggccagggtg caacctatag ttgggatttc accccttagg ctgaaatttc      240
244 ctttctcac ttaagtaaaa aaaaaaacia aaagttttag tttttgtatg aaaatgcttt      300
246 tttatagcaa ttttatatga ttagaaaaatt aaactattcc ccagtgtttg cacagggaac      360
248 atagaa      366
251 <210> SEQ ID NO: 23
252 <211> LENGTH: 96
253 <212> TYPE: DNA
254 <213> ORGANISM: Glycine max
256 <400> SEQUENCE: 23
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259 aatgatgaaa cgtgtctgct aatgagattg agtgtg      96
262 <210> SEQ ID NO: 24
263 <211> LENGTH: 321
264 <212> TYPE: DNA
265 <213> ORGANISM: Glycine max
267 <400> SEQUENCE: 24
268 tcctttggct cactattgac gattttctcg atgattaatt gacccaacat tctgtttgta      60
270 actttattta taaaacaaat atttgtactt caattataac aacaaattta agaagaatat      120
272 atatatatat atatttgtga tggaaatgat catgaaagaa acagaatcaa tatttcttat      180
274 aatcaagaaa aataatagac tcattttattt cttataaaaa gaaggagata aagtataaaa      240
276 tacaatggt aaacataaaa gaaaaaaaaa ctttttttga ccggtatggt aacgaaaatg      300
278 tagttaaagt ggcacacggg t      321
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284 <213> ORGANISM: Glycine max
286 <400> SEQUENCE: 25
287 taacgctgca tgatttgagt tctgttttgt cggcggggac tagggacaaa tatatttttt      60
289 gttagttaat ttgtatatatt attggtgata tgtctgaagt taagttaatt ggccatgcat      120
291 gtgtgtgtgt gtggtagtga gaagaattga gaaaaagaat gtggtctcca aagtcacacc      180
293 aatac      185
296 <210> SEQ ID NO: 26
297 <211> LENGTH: 3830

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Input Set : A:\PTO.AMC.txt

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301 <400> SEQUENCE: 26
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304 aatgtcaagt gagtttagaa tactaaatga aaattttaac ataaaaaaaa aaaaatcaat 120
306 ggaatggaac ccatccagcg caactagctg agtcacatac agtgccaaaa gacatgggta 180
308 ctacaaatgc tcacttttagt ggctatggaa caaccatcag cattcagctc ttccotTTTTT 240
310 ctgtcgtagg ccaagagaca aagtttgtca caggtttaca aattgattgt ggccacaatc 300
312 acacggtaaa cattagaatg gaagaaaaaa aatctgtcta tgatcgatgt cgtgaacttc 360
314 acccactcca tcaatgaaga atttattttta aatacagtta cacaccaact taataagact 420
316 ttttgcacaa aattacctga ttgggaggaa tatgaattgt cttataaatc acgtattcac 480
318 aagttctact tttaaaaaac tctttacatg tattttccaa aaaaagaaaa atctttacat 540
320 gtatgttaac ctacctaaca aatctctaata taacctataa atttttttaa tgctttttga 600
322 gaaaacttta taggcagata gaagattggt gagagtTTTT taaatgctta tcaacaatct 660
324 cogatagtcc cttagcttta ccaagtacat gaaaatctta catataatgc ttttacttta 720
326 ccaactatta acttgagcac cgaaatcttt accagtatgc tcatttgatg catattaaaa 780
328 tgtacaaaat tttatagagg cctgatcaat accatcgaat gaaaccttaa tgacatgcta 840
330 cttgttagcg atgtcaataa aggccttactc aaggattatt ccacaggcct aaatcataga 900
332 caattttact taattgtatt tattcaatta gtccttagat gtcaaagaat ctattagatg 960
334 atagtttttag tggcatgata gagaatgaaa cccacatcta taaaaaaaag aagacaaaag 1020
336 ttagtttttag atctttaatc acttggtgtga attcatatta gttttacgtg tattcgaagt 1080
338 gaaaatatct atctgtatga gaccataaac attccttatga gagacttggt tgaagtataa 1140
340 tttttcatag tacagtaaaag ctgattgttg ttttttctcg tacgcaaaat ttatattcag 1200
342 gacaatgttt aagagtgaag acataataaa attaacctca caaaaagtaa gtatatatat 1260
344 atatatatat atatatatat atataataat ctcaatcaat taaaataata ataaggacaa 1320
346 ataaatagat tctcacaaaa tataatttat tattaaatta attttttaaca ttataactta 1380
348 acgataaaat atttttttta tattttttta tgaactaatt taacaactca tcacatcttg 1440
350 caaaacaaaa tgaatcattt atcctaataa taattttaatt taggcgttta ttttatgatg 1500
352 atttagcatc tttttgggag aatactaaaa aacatataaa agaaaaagaa atattcagga 1560
354 tgaaaaatga aatgcgtgtg aaaattggaa ggaggtgaagg ctgggtcgac ccagatctag 1620
356 ttgagctcac caactcccg cccattttcc ttatttatag acagagtctg attgtttcct 1680
358 caccactccc tccactctct ttctctagtc ctgttatctc tcagcgcgta aagcatggct 1740
360 ttgttggtgg agaaaaccac gagtggctgc gagtacaagg tcaaggacct ttccaggcc 1800
362 gacttcggcc gcctcgagat cgagctggcc gaggttgaga tgcccgccct catggcctgt 1860
364 cggaccgagt tcggcccttc ccagcccttc aagggggccc gcatcaccgg ctccctccac 1920
366 atgaccatcc agaccgctg tctcattgag accctcaccg cccttgggcg cgaggtccgc 1980
368 tgggtgctct gcaacatctt ctccacccag gaccacgccg ccgcccgtat tgcccgcgac 2040
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372 cgcgcctctg actggggccc cgggtggtga cccgacctca tcgtcgacga cgggtggtgac 2160
374 gctacccttc tcatccacga aggcgtcaag gccgaggagc tctatgagaa gaccggcgaa 2220
376 ctccccgacc ccaactccac cgacaacgcc gagtttcaga tcgtgcttac catcatcaga 2280
378 gatgggttga agaccgatcc caccaggtag cgcaagatga aggagcgtct cgttgggggt 2340
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382 ctcttccctg ctattaatgt caatgactct gtcaccaaga gcaaggtaat gtctcttttt 2460
384 cccccagatc tagtgtcttt tttgtgttaa aatgtaggat tgagttcgga tctgttgttt 2520
386 ttggatgggt tttgtgccat tggtgaaatg aggttttgaa cctgtcaact gtttgactaa 2580
388 tgtcctctaa gaagtctgga tcgggtattgg gtgctatctt agtgtgtttg gatctgtgtg 2640
390 ttgaaacgtc agaacttag taagttgctt gctaacgtga ctttaggtaa atggtcacat 2700
392 gttttattac acaaataaag aattgattct gagtgcacat tttgatttga agctactttt 2760

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Use of n and/or Xaa has been detected in the Sequence Listing.  
 Review the Sequence Listing to insure a corresponding  
 explanation is presented in the <220> to <223> fields of  
 each sequence using n or Xaa.



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/037,598

DATE: 01/26/2002

TIME: 16:29:32

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01252002\J037598.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34

L:1338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34

L:1340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34

L:1346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34